IN THE CLAIMS

1 (Previously Presented). A method comprising:

determining channel prediction terms for a channel, from both first channel estimation terms derived from a first common pilot channel signal and second channel estimation terms derived from a second common pilot channel signal;

adaptively calculating channel prediction terms from first and second channel estimation terms by receiving antenna transmission characteristics associated with one or more antennas of a plurality of antennas in order to controllably adjust the future transmission patterns of the channel and selecting at least one antenna transmission characteristics from the antenna transmission characteristics based on the channel prediction terms; and

enabling control over future transmission patterns of the channel using the channel prediction terms.

2 (Original). The method of claim 1, including predicting a future state of the channel at a specified time based on the channel prediction terms.

3 (Original). The method of claim 2, including storing the first and second channel estimation terms in order to determine the channel prediction terms in response to the first and second common pilot channel signals, respectively.

Claims 4 and 5 (Canceled).

6 (Previously Presented). The method of claim 1, wherein adaptively calculating includes receiving one or more weighted values associated with one or more antennas of a plurality of antennas where said first common pilot channel signal is from a first antenna of the plurality of antennas and said second common pilot channel signal is from a second antenna of the plurality of antennas.

7 (Previously Presented). The method of claim 1, including using a feedback signal based on the channel prediction terms to control the future transmission patterns of the channel according to the future state of the channel at the specified time.

8 (Original). The method of claim 6, including:

selecting at least one weighted value from the one or more weighted values based on the channel prediction terms;

providing the at least one weighted value to the first and second antennas to accurately assess the future state of the channel at the specified time; and

separating first and second channel propagation paths associated with the first and second antennas based on the first and second common pilot channel signals.

9 (Original). The method of claim 8, including estimating phase and magnitude of the channel for the first and second channel propagation paths to derive the first and second channel estimation terms.

10 (Original). The method of claim 4, wherein the first channel estimation terms correspond to a channel estimation term calculated in at least one iteration prior to a current iteration of the one or more iterations.

11 (Original). The method of claim 10, wherein the second channel estimation terms correspond to a channel estimation term calculated in the current iteration of the one or more iterations.

12 (Original). The method of claim 6, including operating the first and second antennas of the plurality of antennas in a closed loop transmit diversity mode.

13 (Original). The method of claim 12, including providing feedback, including the at least one weighted value of the one or more weighted values, to the first and second antennas of the plurality of antennas.

14 (Original). The method of claim 13, including controlling at the specified time a transmission pattern over the channel from at least one antenna of the first and second antennas to match the future state of the channel and substantially reduce the effective loop delay in the closed loop transmit diversity mode.

Claims 15-26 (Canceled).

27 (Previously Presented). A wireless device comprising:

a communication interface;

a processor coupled to the communication interface; and

a storage coupled to the processor, said storage storing instructions to:

determine for a traffic channel directed to the communication interface, channel prediction terms from both first channel estimation terms derived from first common pilot channel signal and second channel estimation terms derived from second common pilot channel signal,

predict a future state of the traffic channel at a specified time based on the channel prediction terms,

control future transmission patterns using the future state of the traffic channel at the specified time; and

the storage to store the first and second channel estimation terms in order to determine the channel prediction terms in response to the first and second common pilot channel signals, respectively.

28 (Original). The wireless device of claim 27 comprises a transceiver adapted to communicate with a base transceiver in a closed loop transmit diversity mode.

29 (Previously Presented). A mobile transceiver comprising:

a communication interface;

a processor coupled to the communication interface; and

a storage coupled to the processor, said storage storing instructions to:

determine for a traffic channel directed to the communication interface, channel prediction terms based on channel estimation terms derived from common pilot channel signals of at least two antennas,

in response to the common pilot channel signals, predict a future state of the traffic channel at a specified time and provide feedback information over a feedback channel,

control future transmission patterns over the at least two antennas using the future state of the traffic channel at the specified time; and

the storage to store the first and second channel estimation terms in order to determine the channel prediction terms in response to the first and second common pilot channel signals, respectively.

30 (Original). The mobile transceiver of claim 29 comprises one or more antennas coupled to the communication interface, said one or more antennas adapted to communicate with a base station in a closed loop transmit diversity mode.